

## UNCLASSIFIED

## RDT&amp;E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

February 2002

BUDGET ACTIVITY

06 - Management and Support

PE NUMBER AND TITLE

0605306F Ranch Hand II Epidemiology Study

PROJECT

2767

COST (\$ in Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
2767 Ranch Hand II Epidemiology Study	4,184	10,849	11,029	4,834	4,950	4,312	0	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0

(U) A. Mission Description

As a result of Presidential direction, PE 0605306F was established to conduct a 20-year epidemiology investigation of approximately 1,200 Air Force personnel who were involved with aerial spraying of herbicides in Vietnam from 1962 to 1971 (Operation Ranch Hand). The objective of this investigation is to determine whether long-term health effects exist and can be attributed to occupational exposure to phenoxy herbicides and their associated dioxins.

This project involves a 20-year study, which was initiated in 1982, that compares United States Air Force (USAF) Ranch Hand personnel to a control group of USAF crew members and support personnel who were not exposed to herbicides while serving in Southeast Asia. Approximately 20,000 individuals (exposed personnel group plus control group) are participating in the annual mortality study, with approximately 2,200 (exposed personnel group plus control group) of these participating in the detailed morbidity study during each physical examination cycle. The detailed physical examination cycle includes follow-up health examinations at the 3-, 5-, 10-, 15-, and 20-year time periods. The study includes examination of the possible occurrence of birth defects in children as determined from children's medical records and family medical histories. The Congressionally-established Ranch Hand Advisory Committee has directed that all study findings be reported to the scientific community as peer-reviewed journal articles. Note: This program is comprised of six cycles and each cycle consists of participant physical examinations followed by data analysis and report generation. The largest expenditure of funds occurs during the physical exam cycles such as in 1997-1998 and 2002-2003. The program is currently in the preparation phase for physical exam cycle 6; therefore, significantly more funds will be required in FY 2002 and FY 2003 than were required in FY 2000 and FY 2001.

(U) FY 2001 (\$ in Thousands)

- (U) \$1,307 Conducted analyses as directed by the Congressionally-established Ranch Hand Advisory Committee. Conducted process review prior to final examination cycle to determine potential participation rates, requirements for in-house or regional examination sites, and statistical, schedule, and cost implications of the aging study population.
- (U) \$1,430 Conducted other agency/university studies supporting scientific effort. Completed Center for Disease Control study to test for the presence of other forms of dioxin than found in Agent Orange. Completed morbidity and mathematical modeling. Completed dioxin half-life and serum dioxin analyses. Started semen DNA study.

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BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
<b>06 - Management and Support</b>	<b>0605306F Ranch Hand II Epidemiology Study</b>	<b>2767</b>
(U) <u>A. Mission Description Continued</u>		
(U) <u>FY 2001 (\$ in Thousands) Continued</u>		
(U) \$1,447	Processed and documented examination data to include updating of the participant database. Conducted medical records coding. Performed the annual mortality analysis of approximately 1,200 Ranch Hand personnel and 19,000 comparison personnel. Conducted data analysis for articles to be submitted to peer-reviewed journals as directed.	
(U) \$4,184	Total	
(U) <u>FY 2002 (\$ in Thousands)</u>		
(U) \$7,799	Initiate the sixth and final cycle of physical examinations, questionnaires, and participant database.	
(U) \$1,642	Continue to process and document examination data to include continuing to verify the physical examination database. Conduct new coding and verify the coding of existing medical records. Perform the annual mortality analysis of approximately 1,200 Ranch Hand personnel and 19,000 comparison personnel. Conduct data analysis for articles to be submitted to peer-reviewed journals as directed. Process and document Cycle 6 examination data to include updating of the participant database. Continue to conduct medical records coding.	
(U) \$1,408	Process and document examination data. Continue archiving previous cycles' examination data and digitize and archive the Cycle 6 data as received. Conduct medical records coding and verification of examination database and Cycles 1 through 6 coding. Perform annual mortality analysis. Conduct data analysis for journals and reports.	
(U) \$10,849	Total	
(U) <u>FY 2003 (\$ in Thousands)</u>		
(U) \$9,811	Complete the sixth and final cycle of physical examinations, questionnaires, and participant database.	
(U) \$1,018	Continue to process and document examination data to include continuing to verify the physical examination database. Conduct new coding and verify the coding of existing medical records. Perform the annual mortality analysis of approximately 1,200 Ranch Hand personnel and 19,000 comparison personnel. Conduct data analysis for articles to be submitted to peer-reviewed journals as directed. Process and document Cycle 6 examination data to include updating of the participant database. Continue to conduct medical records coding.	
(U) \$200	Continue to process and document examination data. Continue archiving previous cycles' examination data and digitize and archive the Cycle 6 data as received. Conduct medical records coding and verification of examination database and Cycles 1 through 6 coding. Perform annual mortality analysis. Conduct data analysis for journals and reports. Continue maintenance of Ranch Hand LAN.	
(U) \$11,029	Total	
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<p>(U) <b><u>B. Budget Activity Justification</u></b>            This program is in Budget Activity 6, Management and Support, since it includes research and development efforts directed towards support of installations or operations required for general research and development use.</p>																																																															
<p>(U) <b><u>C. Program Change Summary (\$ in Thousands)</u></b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 10%; text-align: center;"><u>FY 2001</u></th> <th style="width: 10%; text-align: center;"><u>FY 2002</u></th> <th style="width: 10%; text-align: center;"><u>FY 2003</u></th> <th style="width: 20%; text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget</td> <td style="text-align: center;">4,315</td> <td style="text-align: center;">10,952</td> <td style="text-align: center;">11,338</td> <td style="text-align: center;">TBD</td> </tr> <tr> <td>(U) Appropriated Value</td> <td style="text-align: center;">4,356</td> <td style="text-align: center;">10,952</td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    a. Congressional/General Reductions</td> <td></td> <td style="text-align: center;">-103</td> <td></td> <td></td> </tr> <tr> <td>    b. Small Business Innovative Research</td> <td style="text-align: center;">-131</td> <td></td> <td></td> <td></td> </tr> <tr> <td>    c. Omnibus or Other Above Threshold Reprogram</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    d. Below Threshold Reprogram</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>    e. Rescissions</td> <td style="text-align: center;">-41</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 2002 PBR</td> <td></td> <td></td> <td style="text-align: center;">-309</td> <td></td> </tr> <tr> <td>(U) Current Budget Submit/FY 2003 PBR</td> <td style="text-align: center;">4,184</td> <td style="text-align: center;">10,849</td> <td style="text-align: center;">11,029</td> <td style="text-align: center;">TBD</td> </tr> </tbody> </table> <p>(U) <b><u>Significant Program Changes:</u></b>            None. The increase in FY 2002 and FY 2003 funding is due to the physical exams scheduled in these years. The increase is a normal part of the cyclical nature of funding in this program.</p>										<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Total Cost</u>	(U) Previous President's Budget	4,315	10,952	11,338	TBD	(U) Appropriated Value	4,356	10,952			(U) Adjustments to Appropriated Value					a. Congressional/General Reductions		-103			b. Small Business Innovative Research	-131				c. Omnibus or Other Above Threshold Reprogram					d. Below Threshold Reprogram					e. Rescissions	-41				(U) Adjustments to Budget Years Since FY 2002 PBR			-309		(U) Current Budget Submit/FY 2003 PBR	4,184	10,849	11,029	TBD
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